

ABSTRACT OF THE DISCLOSURE

C/ Gasolines with a low sulphur content can be obtained from a catalytic cracking gasoline using an apparatus having a fractionation column (1) provided with a line (2) for introducing raw gasoline from a catalytic cracking step, a line (3) in the upper portion of the column for taking off a light cut, and a line (4) in the lower portion of the column for taking off the heavy cut a hydrotreatment zone (5) containing a catalytic bed also has an inlet line (6) for introducing the light gasoline cut to be treated. This line inlet is connected to the fractionation column (1), or to a hydrotreatment zone (7), containing a palladium catalyst, positioned between the fractionation column and the hydrotreatment zone. This hydrotreatment zone also has an outlet line (8) for discharging hydrotreated effluent. Light hydrotreated gasoline is introduced into a stripping zone (9) which has a line (10) for evacuating H_2S and an outlet line (11) for comprising stripped light gasoline. The apparatus also has at least one of the following sweetening zones: a sweetening zone (12) located after the stripping zone, having a line for introducing the stripped light gasoline and a line (14) for supplying an oxidizing agent to the sweetening zone; a treatment zone (7), located before the hydrotreatment zone, having a line (3) for introducing the light gasoline cut from the fractionation column, an outlet line for removing the treated light gasoline cut, and at least one catalyst bed containing 0.1-1% of palladium deposited on a support. The apparatus further has a line (13) for taking the stripped and sweetened light gasoline out of the apparatus which is connected either to the sweetening zone (12) or to the stripping zone (9).